

b1
"Silicon Processing for the VLSI Era Vol. 1" by Wolf and Tauber (Lattice Press, Sunset Beach, CA, 1986).

In the Claims:

Please amend Claims 11, 18 and 20, such that they read, respectively, as set forth below. A copy of the amended claims, appears in marked form in Appendix 2. A copy of all of the pending claims, including any amendment or addition herein, appears in marked form in clean form in Appendix 3.

b2
11. (Twice Amended) A method of forming an oriented titanium layer on a substrate, the method comprising:

placing the substrate in a sputtering chamber comprising a titanium target;
flowing a first gas comprising hydrogen into the sputtering chamber through a first gas injector; and
sputter depositing the titanium layer onto the substrate by applying power to the target and by providing a second gas in the sputtering chamber through a second gas injector, wherein the hydrogen is activated and whereby the deposited titanium layer has a preferred crystal orientation.

b3
18. (Twice Amended) A method of depositing an oriented aluminum layer, the method comprising:

depositing a titanium layer wherein the depositing a titanium layer comprises:
placing the substrate in a deposition chamber comprising a source of titanium; and
depositing the titanium layer onto the substrate by physical vapor deposition of the source of titanium under conditions wherein the atmosphere in the deposition chamber comprises hydrogen and wherein the hydrogen is activated, whereby the titanium layer has a <0002> preferred crystal orientation; and

depositing an aluminum layer overlying the titanium layer, whereby the aluminum layer has a preferred <111> crystal orientation.

20. (Twice Amended) A method of depositing an oriented aluminum layer, the method comprising:

depositing a titanium layer the titanium layer deposition comprising:

placing the substrate in a sputtering chamber comprising a titanium target;

flowing a first gas comprising hydrogen into the sputtering chamber through a first gas injector; and

sputter depositing the metal layer onto the substrate by applying power to the metal target and by providing a second gas in the sputtering chamber through a second gas injector, wherein the hydrogen is activated and whereby the deposited metal layer has a preferred crystal orientation; and

depositing an aluminum layer overlying the titanium layer, whereby the aluminum layer has a preferred $\langle 111 \rangle$ crystal orientation.